Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (cancelled)

2. (currently amended) The antenna of ~~claim 1~~ claim 24 further comprising a dielectric material serving to mechanically connect, at least in part, said radiative antenna elements to said ground plane while electrically insulating said radiative antenna elements from said ground plane.

3. (original) The antenna of claim 2 further comprising an electrical conductor electrically connected to said radiative antenna elements at said apex point and extending away from said apex point toward a ground plane side of said antenna through said dielectric material to allow connection to a transmission line for interfacing said radiative antenna elements to a radio frequency transmitter and/or receiver.

4. (currently amended) The antenna of ~~claim 1~~ claim 24 further comprising an electrical connector to allow connection of said radiative antenna elements and said ground plane to a transmission line.

5. (currently amended) The antenna of ~~claim 1~~ claim 24 wherein said ground plane comprises a circular conductive ground plane having a radius of at least 1/4 wavelength of a tuned radio frequency.

6. (currently amended) The antenna of ~~claim 1~~ claim 24 wherein said ground plane comprises a rectangular conductive ground plane having a length and width of at least 1/4 wavelength of a tuned radio frequency.

7. (currently amended) The antenna of ~~claim 1~~ claim 24 wherein said ground plane comprises a triangular conductive ground plane having minimum distances from the center of the triangular conductive ground plane to the sides of the triangular conductive ground plane of at least 1/4 wavelength of a tuned radio frequency.

8. (currently amended) The antenna of ~~claim 1~~ claim 24 wherein said ground plane

comprises a plurality of conductive linear rods each having a length of at least 1/4 wavelength of a tuned radio frequency.

9. (currently amended) The antenna of ~~claim 1~~ claim 24 wherein each of said radiative antenna elements are substantially linear and have a physical length determined by a pre-defined radio frequency.

10. (currently amended) The antenna of ~~claim 1~~ claim 24 wherein said acute angle between each of said radiative antenna elements and said ground reference is between 1 degree and 89 degrees.

11. (currently amended) The antenna of ~~claim 1~~ claim 24 further comprising a mounting mechanism to allow mounting of said antenna to another device or structure.

12. (currently amended) The antenna of ~~claim 1~~ claim 24 wherein said radiative antenna elements are equally spaced in angle circumferentially around 360 degrees.

13. (currently amended) A method to construct a multi-polarized antenna for transmitting and/or receiving radio frequency (RF) signals, said method comprising:

generating at least two radiative antenna elements each having a first end and a second end and each being tuned to a predetermined radio frequency;

electrically connecting said second ends of said radiative antenna elements at an apex point such that each radiative antenna element is disposed outwardly away from said apex point at an acute angle relative to and on a first side of an imaginary plane intersecting said apex point; ~~and~~

positioning an electrically conductive ground plane at and/or to a second side of said imaginary plane; and

positioning a parasitic conductive reflector to said first side of said imaginary plane and away from said at least two radiative antenna elements.

14. (original) The method of claim 13 further comprising mechanically connecting said radiative antenna elements to said ground plane using at least a dielectric material to electrically insulate said radiative antenna elements from said ground plane.

15. (original) The method of claim 14 further comprising connecting an electrical conductor to said radiative antenna elements at said apex point such that said electrical conductor extends away from said apex point toward a ground plane side of said antenna and through said dielectric material to allow connection to a transmission line for interfacing said radiative antenna elements to a radio frequency transmitter and/or receiver.

16. (original) The method of claim 13 further comprising connecting an electrical connector to said radiative antenna elements and said ground plane to allow connection of said antenna to a transmission line.

17. (original) The method of claim 13 wherein said ground plane comprises a circular conductive ground plane having a radius of at least 1/4 wavelength of a tuned radio frequency.

18. (original) The method of claim 13 wherein generating each of said at least two radiative antenna elements comprises cutting a substantially linear conductive material to a predetermined physical length.

19. (original) The method of claim 13 wherein said predetermined radio frequency for each of said radiative antenna elements is substantially the same for each of said radiative antenna elements.

20. (original) The method of claim 13 wherein said predetermined radio frequency for each of said radiative antenna elements is substantially different for each of said radiative antenna elements.

21. (original) The method of claim 13 wherein an angle between each of said radiative antenna elements and said ground reference is between 1 degree and 89 degrees.

22. (original) The method of claim 13 further comprising connecting a mounting mechanism to said antenna to allow mounting of said antenna to another device or structure.

23. (original) The method of claim 13 wherein said radiative antenna elements are equally spaced in angle circumferentially around 360 degrees.

24. (original) A multi-polarized antenna for transmitting and/or receiving radio frequency (RF) signals, said antenna comprising:

at least two radiative antenna elements each having a first end and a second end, and wherein said second ends of said radiative antenna elements are electrically connected at an apex point and are each disposed outwardly away from said apex point at an acute angle relative to and on a first side of an imaginary plane intersecting said apex point;

an electrically conductive ground plane located at and/or to a second side of said imaginary plane; and

a parasitic conductive reflector positioned to said first side of said imaginary plane and away from said at least two radiative antenna elements.

25. (original) The antenna of claim 24 wherein said parasitic conductive reflector is substantially conically shaped.

26. (original) The antenna of claim 24 wherein said parasitic conductive reflector comprises a flat plane.

27. (currently amended) A stacked configuration of antennas for improving gain along a particular spatial dimension, said stacked configuration comprising at least two antennas co-linearly positioned in spatial proximity to each other along an imaginary line and having substantially the same spatial orientation, and said antennas each comprising at least two radiative antenna elements each having a first end and a second end, and wherein said second ends of said radiative antenna elements are electrically connected at an apex point and are each disposed outwardly away from said apex point at an acute angle relative to and on a first side of an imaginary plane intersecting said apex point, and an electrically conductive ground reference located at and/or to a second side of said imaginary plane, and wherein each antenna of said at least two antennas further comprises a parasitic conductive reflector positioned to said first side of said imaginary plane and away from said at least two radiative antenna elements.

28. (cancelled)

29. (original) The stacked configuration of claim 27 wherein a spatial separation distance between any two adjacent antennas of said at least two antennas is between 2/3 of a wavelength and 3 wavelengths of a predetermined radio frequency carrier signal. More or less spacing is not

as effective in gain but is effective in spatial diversity.

30. (original) The stacked configuration of claim 27 wherein said ground reference comprises a ground plane.

31. (original) The method of claim 13 further comprising mechanically connecting a motor to said multi-polarized antenna to allow rotation of said multi-polarized antenna about a defined axis of said antenna.